In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

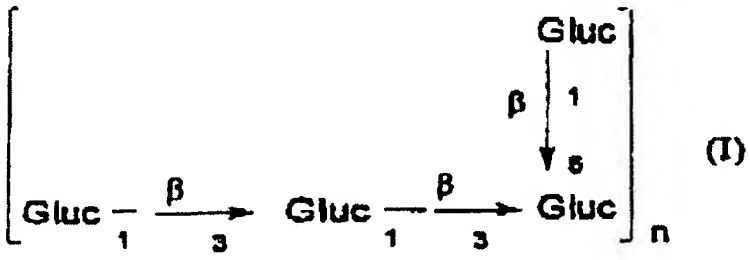
Claims 1-10 (canceled)

Claim 11 (currently amended): A medicine comprising as an active principle an effective amount of at least one oligosaccharide substance which is capable of modifying apoptosis dysfunctions, the oligosaccharide substance being selected from the group consisting of ~~oligosaccharides derived by enzymatic or chemical process from polymers of the group consisting of (1→3) β-glucans, which optionally comprise (1→6) β- branching, and~~ oligosaccharides derived by enzymatic or chemical process from sulfated galactans.

Claim 12 (previously presented): The medicine according to claim 11, wherein the oligosaccharide substance comprises on at least some of its individual units, at least one substituent of the group consisting of sulfate, methyl and acetyl groups.

Claim 13 (previously presented): The medicine according to claim 11, wherein the oligosaccharides are derived from carrageenans, agars or porphyrans.

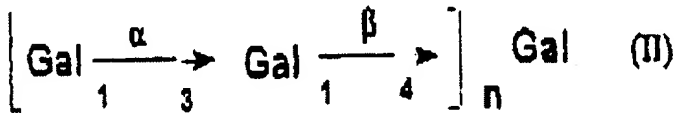
Claim 14 (previously presented): A medicine comprising as an active principle an effective amount of at least one oligosaccharide capable of modifying apoptosis dysfunctions and which satisfies the formula:



in which n represents an integer from 1 to 50, and in which the number of branches is from 0 to 3 per repeat unit.

Claim 15 (previously presented): The medicine according to claim 14, wherein n in formula (I) represents an integer from 5 to 10.

Claim 16 (previously presented): A medicine comprising as an active principle an effective amount of at least one repeat disaccharide which is capable of modifying apoptosis dysfunctions and which satisfies the formula:



in which n represents an integer from 1 to 50.

Claim 17 (previously presented): The medicine according to claim 16, wherein n in formula (II) represents an integer from 1 to 20.

Claim 18 (previously presented): The medicine according to claim 16, wherein at least some of the repeat disaccharides of formula (II) comprise one or more sulfate groups.

Claim 19 (Amended) : A medicine comprising as an active principle an effective amount of a product which is capable of partially inhibiting apoptosis and which is obtained by hydrolysis from sodium iota-carrageenate, the product ~~comprising~~ consisting of a mixture of oligo-iota-carrageenans named I_9, which has a total saccharide content of 62%, and which has a distribution profile by size estimated by electrophoresis on polyacrylamide gel of:

iota-neocarratetraose	(DP 2)	8-12%
iota-neocarrahexaose	(DP 3)	23-27%
iota-neocarraoctaose	(DP 4)	18-22%
iota-neocarradecaose	(DP 5)	13-17%
iota-neocarradodecaose	(DP 6)	8-12%
oligo-iota-carrageenan	(DP 7)	3-7%

oligo-iota-carrageenans consisting of 8 to 15 repeat disaccharides (DP 8-15) 13-17%.

Claim 20 (previously presented): A medicine comprising as an active principle an effective amount of a product capable of activating apoptosis dysfunction which is obtained by acidic aqueous extraction from brown algae, the product comprising a mixture of oligo-(1→3)-β-glucans named L_{11} and comprising from 1 to 50 saccharide units, the product having the NMR spectrum shown in Figure 1.

Claim 21 (previously presented): The medicine according to claim 20, wherein the brown algae is named Laminaria digitata.

Claim 22 (previously presented): The medicine according to claim 20, wherein the mixture of oligo-(1→ 3) β glucans comprises from 20 to 30 saccharide units.

Claim 23 (Amended): A medicine comprising as an active principle an effective amount of a product capable of activating apoptosis dysfunctions and ~~comprising~~ consisting of fraction DP7 of a product named I_9.

Claim 24 (previously presented): A method for treating apoptosis dysfunctions comprising administering to a patient at least one oligosaccharide substance selected from the group consisting of:

- oligosaccharides which are derived, by enzymatic or chemical process, from polymers comprising (1→ 3)-β-glucans which optionally comprise (1→ 6)- β- branching, and

- oligosaccharides which are derived, by enzymatic or chemical process, from sulfated galactans.

Claim 25 (previously presented): The method according to claim 24, wherein the oligosaccharide substances comprise on at least some of their individual units, at least one substituent of the group consisting of sulfate, methyl and acetyl groups.

Claim 26 (previously presented): The method according to claim 24 wherein the sulphated galactans are carrageenans, agars or porphyrans.

Claim 27 (previously presented): A method for treating apoptosis comprising administering to a patient a product selected from the group consisting of oligosaccharides of formula (I) and oligosaccharides of formula (II).

Claim 28 (previously presented): A method for treating apoptosis comprising administering to a patient a product selected from the group consisting of products referred to as I_9 and L_{11} and a product constituting fraction DP 7 of product I_9.